



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,472	01/21/2004	Joan Evelyn Conover	SAIC0008-CON1	2030
75131 7590 04/16/2008 KING & SPALDING LLP (SAIC CUSTOMER NUMBER) ATTN: GEORGE T. MARCOU 1700 PENNSYLVANIA AVE, NW SUITE 200 WASHINGTON, DC 20006			EXAMINER PHAM, HUNG Q	
			ART UNIT 2168	PAPER NUMBER
			MAIL DATE 04/16/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/760,472	Applicant(s) CONOVER ET AL.	
	Examiner HUNG Q. PHAM	Art Unit 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33 and 36-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33 and 36-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2100

DETAILED ACTION

Response to Amendment

As indicated in the Interview on 06/28/2007, the claims were allowable as proposed by the examiner. The indicated allowability of the claims is withdrawn in view of the applied reference as set forth in the Office Action 06/28/2007. Rejections based on the applied reference(s) follow.

Claim Objections

Claim 33 is objected to because of the following informalities: *including at least one of the following attribute a keyword, one or more matched words...* (A colon should be used in the clause: *including at least one of the following attribute: a keyword, one or more matched words*)
Appropriate correction is required.

Claim 42 recites similar features and is objected as discussed above with respect to claim 33.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 43 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2100

Regarding claim 43, the clause, *the at least one information repository*, references to other items in the claims. It is unclear what item is being referenced.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 33, 36-40 and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marques [USP 6,182,066] in view of Teare et al. [USP 6,151,624].

Regarding claims 33 and 42, Marques teaches a system and method for *automatically cataloguing documents located in multiple heterogeneous repositories to facilitate document search and retrieval capabilities* (Marques, Abstract), the system comprising:

Art Unit: 2100

a scanning tool for scanning the multiple heterogeneous repositories to collect keywords for the documents located therein (Crawler is used to seek out the documents from external and internal sources as shown in FIG. 2 via word searching (Marques, Col. 3, Lines 28-34). As seen, crawler *a scanning tool for scanning the multiple heterogeneous repositories*, e.g., external and internal sources of FIG. 2, and the purpose is *to collect keywords for the documents located therein* (Marques, Col. 5, Lines 46-65));

an index of the documents built using the collected keywords (Content of collected document are tokenized into term string and replaced by 32 bit integers, and mapped to an entry of vector as *an index of the documents* (Marques, Col. 5, Line 46-Col. 6, Line 7));

a mapping tool for cataloguing the documents using the index to one or more classes, each of the one or more classes including keywords representative of that class (Marques, Col. 3, Lines 35-56, Col. 6, Lines 6-7 and 13-22 and Col. 7, Lines 51-55);

a computing device for creating metadata for each of the catalogued documents, wherein the created metadata for each of the catalogued document indexed within the index including at least one of the following attributes a keyword, one or more matched words, and a classmark (As disclosed by Marques, documents are assembled and categorized at Customer Internet Server, where a Channel Map is created. Each entry in the Channel Map may include a list of channels in which documents are to appear (Marques, Col. 3 Lines 35-45). Each channel represents a category or group of categories of related information (Marques, Col. 2 Lines 50-52). A sample Channel Map is copied as below:

Art Unit: 2100

TYPE	SERVER	DIRECTORY	CHANNELS
Web	HR	/publish/benefits/401k	401k
Web	HR	/publish/jobopenings	Jobs
Web	Marketing	/publish/product/specs	Product Specs
Web	www.badco.com	/pub/product/specs	Competitive Specs
Web	www.goodco.com	/pub/product/electronic	Customer Products
PCFile	engineering	/projects/chipdesigns	Chip Designs
PCFile	marketing	/reports/companalysis	Competitive Anly.
FTP	engineering	/projects/status	Status Reports
Notes	engineering	/specs/chipspecd	A1230 Design

The Marques technique as discussed indicates *a computing device*, e.g., Customer Internet Server, *for creating metadata indicative of each of the catalogued documents*, e.g., 401K, Jobs, Product Specs... and *indexing each of the documents in an index of an integrated library according to the metadata*, e.g., the document is listed in corresponding Channel of Channel Map according to Channel name such as Jobs, wherein *the metadata including a keyword*, e.g., the URL);

wherein the index retains characteristics of each of the multiple heterogeneous repositories as applied to each of the documents and wherein the characteristics of the multiple heterogeneous repositories are transparent to the user when one or more of the documents are accessed (Each entry of Channel Map retains the repository location, e.g., www.badco.com and www.goodco.com, as applied to each of the documents. When a user access the document utilizing the repository location, the repository location is transparent to the user via a browser such as Internet Explorer to access the document);

retrieving one or more of the documents within the multiple heterogeneous repositories corresponding to a user search request by utilizing the metadata (Marques, Col. 5 Line 30-Col. 8 Line 15).

The missing of Marques is *a pre-defined data structure* for storing metadata and the step of *updating the index with the created metadata*.

Art Unit: 2100

Teare teach a mechanism for associating metadata with network resources (Teare, Abstract). FIG. 1 as taught by Teare indicates *a pre-defined data structure* for storing the metadata, e.g., the URL.

Teare further discloses the step of *updating the index with the created metadata* (Teare, Col. 9 Line 65-Col. 10 Line 11).

As strongly suggested by Teare, URLs are difficult to remember (Teare, Col. 2 Line 45). An URL that is accurate one day might be inaccurate the next day, so that the network resource cannot be located (Teare, Col. 2 Lines 63-65). As further suggested by Teare, the index need to be notified and updated to reflect the change in metadata (Teare, Col. 10 Lines 1-5).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to store metadata into a predefined structure and updating the index as taught by Teare. By storing the metadata in a predefined data structure, the network resource can be located easily without the need to remember the URL of the resource. By updating the index, the change in metadata is reflected on time.

Regarding claims 36 and 44, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claims 33 and 42, Teare further discloses *the metadata is stored in eXensible Markup Language (XML) format* (Teare, Col. 6, Lines 26-34).

Regarding claims 37 and 45, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claims 33 and 42, Teare further discloses *the metadata is stored in Resource Description Framework (RDF) format* (Teare, Col. 6, Lines 35-39).

Regarding claim 38, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claim 33, Marques further discloses *the scanning tool is at least one spider* (Marques, Col. 3, Lines 28-34).

Regarding claim 39, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claim 33, Marques further discloses *the mapping tool is a domain ontology* (Marques, Col. 3, Lines 35-56).

Regarding claim 40, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claim 39, Marques further discloses *the domain ontology is a classification hierarchy* (Marques, Col. 3, Lines 35-56).

Regarding claim 43, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claim 42, Marques further discloses *scanning the at least one information repository to collect keywords is performed by a spider* (Marques, Col. 3, Lines 28-34).

Claims 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marques [USP 6,182,066] and Teare et al. [USP 6,151,624] as applied to claim 33, and further in view of Becker [USP 6,301,579 B1].

Regarding to claim 41, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claim 33, but fail to disclose *the mapping tool is a neural network*. Becker teaches a method for constructing a decision

Art Unit: 2100

table classifier (Becker, Abstract). Becker further discloses neural network as a well-known type classifier (Becker, Col. 2, lines 7-20). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Marques and Teare system by including a neural network for classification in order to organize electronic documents for storage and subsequent retrieval.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIM T. VO can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUNG Q PHAM/
Primary Examiner
Art Unit 2168

March 26, 2008